

the excess elevation function substantially has a value equal to 1.

REMARKS

I. Introduction

Applicants have reviewed the detailed Office Action mailed 06/11/01 (paper no. 6). Applicants have amended claim 1 and new claims 10-19 have been added. No new matter has been added. Thus, claims 1 and 10-19 are pending. Applicants request reconsideration of the pending claims in view of the above amendments and the following remarks.

By action taken here, Applicants in no way intend to surrender any range of equivalents beyond that needed to patentably distinguish the claimed invention as a whole over the prior art. Applicant expressly reserves all such equivalents that may fall in the range between Applicants' literal claim recitations and combinations taught or suggested by the prior art.

II. Objection to the Drawings

The Examiner objected to the drawings under 37 CFR 1.83(a) asserting that the drawings do not show every feature of the invention specified in the claims. Applicants respectfully traverse the objection. Unlike the plot of the tandem master cylinder pressure (P_{TMC}), a plot of the wheel brake pressure is not required to derive an understanding of the operation of the Applicants' invention. Withdrawal of the objection is respectfully requested.

The drawings were also objected to by the Examiner because Figure 3 contains German labels and the pressure subscript "THZ" in Figure 1 does not correspond to any of the pressure subscripts discussed in the specification. Applicants include herewith a proposed drawing correction amending these informalities in the drawings. No new matter has been added. Withdrawal of the objection is respectfully requested.

III. Objection to the Specification

The abstract of the disclosure was objected to because the Examiner asserted the phrase "in a remote-controlled way" in line 3 from the bottom was unclear. Applicants have amended the abstract to recite "in a controlled way" for purposes of clarification.

Further, the Applicants have amended the disclosure to correct various informalities. In particular, appropriate headings such as “Brief Description of the Drawings” have been included in the specification. On page 4, line 3 from the bottom, the word “mane” has been changed to “made.” On page 4, line 2 from the bottom, “a” has been deleted. On page 5, lines 2 and 3 from the bottom, “ t_4^1 ” has been changed to “ t_3 ”. Withdrawal of the objection is respectfully requested.

IV. Objection to the Claims

Claim 1 was objected to by the Examiner because the pressure subscript “TMZ” in line 3 from the bottom does not correspond with the specification. Amended claim 1 does not include a reference to a pressure subscript “TMZ”, thereby rendering the objection moot. Withdrawal of the objection is respectfully requested.

V. Rejections under 35 U.S.C. § 112, second paragraph

The Examiner rejected claim 1 under 35 U.S.C. §112, second paragraph, as being indefinite for reciting the phrase “in a remote-controlled way” in lines 2 and 3 from the bottom. Applicants’ amended claim 1 does not include the phrase “in a remote-controlled way.” Additionally, the Examiner asserted it was unclear what Applicants intended to claim with the phrase “monotonously diminished.” Applicants’ amended claim 1 does not include the phrase “monotonously diminished.” Withdrawal of the § 112, second paragraph, rejection with respect to claim 1 is respectfully requested.

VI. Rejection under 35 U.S.C. § 102(b)

The Examiner rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by DE-19501760 to Pueschel et al. (“Pueschel”) and U.S. Patent No. 5,158,343 to Reichelt et al. (“Reichelt”). For at least the following reasons, this rejection is respectfully traversed.

Regarding the Examiner’s assertion that claim 1 is anticipated by Pueschel, firstly, nowhere does Pueschel teach or suggest monitoring the wheel brake pressure in the third mode of operation, as recited by the Applicants in amended claim 1. Instead, Pueschel teaches reducing the wheel brake pressure to zero in a third mode of operation, shown in Figure 8 from T3 to the end of the x-axis, rather than monitoring the wheel brake pressure as

claimed by the Applicants.

Secondly, nowhere does Pueschel teach or suggest diminishing the amount of excess elevation in the course of time, as recited by the Applicants in amended claim 1. Rather, Pueschel teaches abruptly diminishing the excess elevation, i.e. once the master cylinder pressure PHZ falls below a threshold value SB, the pressure PRZ drops to zero. See Pueschel column 9, lines 36-40 and Fig. 8.

Regarding the Examiner's assertion that claim 1 is anticipated by Reichelt, nowhere does Reichelt teach or suggest determining when the monitored wheel brake pressure is excessively elevated compared to the tandem master cylinder pressure, as recited by the Applicants in amended claim 1. Rather, Reichelt teaches monitoring the brake pedal velocity and determining when the monitored brake pedal velocity is less than or greater than a threshold value. "In order to ensure that the brake pressure p_{add} is reduced in good time when the necessity for an automatic brake operation has been removed... it is checked in step 203 whether the actuating speed of the brake pedal V_{BP} is less than a second threshold value $V_{BP, threshold2}...$ " See Reichelt column 4, lines 10-15. Unlike the Applicants' claimed invention, Reichelt was not concerned with the pressure in the tandem master cylinder to determine the need for a brake assist function or for use in determining when to terminate the brake assist function. Claim 1 is therefore patentable, and withdrawal of the rejection is respectfully requested.

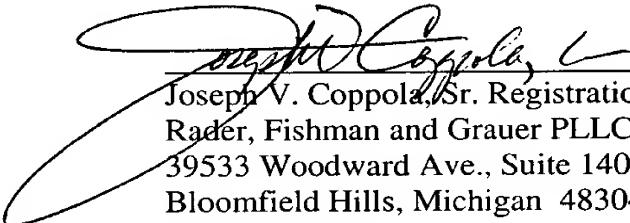
VII. Conclusion

For at least the above reasons, Applicants respectfully submit that the present invention, as claimed, is patentable over the prior art. If the Examiner has any issues that he believes can be expedited by a telephone conference, he is encouraged to telephone the undersigned representative at his earliest convenience.

It is believed that any additional fees due with respect to this paper have already been identified. However, if any additional fees are required in connection with the filing of this paper, permission is given to charge account number 18-0013 in the name of Rader, Fishman and Grauer PLLC.

Respectfully submitted,

Dated:



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MARKED UP VERSION OF ALL AMENDED CLAIMS

1. (Once Amended) A method of operating a brake assistant system which comprises a first mode of operation in which the brake assist system is not actuated, a second mode of operation in which after recognition of an emergency brake situation a pressure build-up of wheel brakes is generated, and a third mode of operation which is provided for the transition from the second into the first mode of operation, [the wheel brake pressure (p_{wheel}) in the third mode of operation being excessively elevated compared to the tandem master cylinder pressure (p_{TMZ}) in a remote-controlled way, characterized in that the amount of excess elevation is monotonously diminished in the course of time.] comprising the steps of:

monitoring the wheel brake pressure in the third mode of operation,

determining when the monitored wheel brake pressure is excessively elevated compared to the tandem master cylinder pressure, and

diminishing the amount of excess elevation in the course of time.